## CORRECTED VERSION

(19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 12 May 2005 (12.05.2005)

PCT

(10) International Publication Number WO 2005/042641 Al

- (51) International Patent Classification<sup>7</sup>: C08L 101/02, C08G 18/10
- (21) International Application Number:

PCT/NL2003/000766

(22) International Filing Date:

4 November 2003 (04.1 1.2003)

(25) Filing Language:

English

(26) Publication Language:

**English** 

- (71) Applicant (for all designated States except US): SUPRAPOLIX B.V. [NL/NL]; EUtech-park MMP 1.28, Horsten 2, NL-5612 AX Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JANSSEN, Henricus, Marie [NL/NL]; Genovevalaan 172, NL-5625 AM Eindhoven (NL). VAN GEMERT, Gaby, Maria, Leonarda [NL/NL]; Rijpelpein 21, NL-5709 BT Helmond (NL). MEUER, Egbert, Willem [NL/NL]; Schoenmakerslaan 7, NL-5583 GC Waalre (NL). BOSMAN, Anton, Willem [NL/NL]; Picushof 9, NL-5613 SB Eindhoven (NL).
- (74) Agent: VAN WESTENBRUGGE, Andries et ah; Nederlandsch Octrooibureau, Scheveningseweg 82, P.O. Box 29720, NL-2502 LS The Hague (NL).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- with amended claims and statement
- (48) Date of publication of this corrected version:

23 February 2006

(15) Information about Correction: see PCT Gazette No. 08/2006 of 23 February 2006, Sec-

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PREPARATION OF SUPRAMOLECULAR POLYMERS CONTAINING QUADRUPLE HYDROGEN BONDING UNITS IN THE POLYMER BACKBONE

(57) Abstract: The present invention relates to a supramolecular polymer comprising quadruple hydrogen bonding units within the polymer backbone, wherein at least a monomer comprising a 4H-unit is incorporated in the polymer backbone via at least two reactive groups up to four reactive groups, provided that the 4H-units are not covalently incorporated in the polymer backbone through one or more silicon-carbon bonds. The invention also relates to processes for preparing such supramolecular polymers and their use in personal care applications, surface coatings, imaging technologies, biomedical applications, (thermo)reversible coatings, adhesive and sealing compositions and as thickening agents, gelling agents and binders.



